

HOW TO DRAW THE RIGHT CONCLUSIONS LOGICAL PLURALISM WITHOUT LOGICAL NORMATIVISM

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A thesis submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree Master of Arts in the Department of Philosophy in the College of Arts and Sciences.

Chapel Hill
2017

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ABSTRACT

Christopher Blake-Turner: How to Draw the Right Conclusions: Logical Pluralism
without Logical Normativism.
(Under the direction of Gillian Russell)

Logical pluralism is the view that there is more than one relation of logical consequence. Roughly, there are many distinct logics and they're equally good. Logical normativism is the view that logic is inherently normative. Roughly, consequence relations impose normative constraints on reasoners whether or not they are aiming at truth-preservation. It has widely been assumed that logical pluralism and logical normativism go together. This thesis questions that assumption. I defend an account of logical pluralism without logical normativism. I do so by replacing Beall and Restall's normative constraint on consequence relations with a constraint concerning epistemic goals. As well as illuminating an important, unnoticed area of dialectical space, I show that distinguishing logical pluralism from logical normativism has two further benefits. First, it helps clarify what's at stake in debates about pluralism. Second, it provides an elegant response to the most pressing challenge to logical pluralism: the normativity objection.

ACKNOWLEDGEMENTS

I am very grateful to Gillian Russell, Matt Kotzen, and John Roberts for encouraging discussion and thoughtful comments at many stages of this project. It improved greatly as a result, and no doubt would have done so even more had I been able to engage with their insights more fully. I'd also like to thank Joanna Lawson for giving me not only careful philosophical feedback, but also crucial moral support.

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Introduction

Although we care about other features of deductive arguments, like soundness and persuasiveness, *validity* is the purview of logic. When an argument is valid, its premises guarantee the truth of its conclusion. Hence logic can be usefully thought of as the systemic study of the guaranteeing relation that holds between the premises and conclusion of a valid argument: *logical consequence*. There are many competing explications of the consequence relation, from classical logic, to the logic of paradox. Each logic separates those arguments that are valid from those that are not; the logics disagree insofar as they impose different partitions on argumentative space. It's natural to think that only *one* logic can be right, that there's one and only one answer to whether a particular argument is valid or not. *Logical pluralism* denies this. According to the pluralist, there is more than one distinct relation of logical consequence. One and the same argument might be valid according to one logic, and invalid according to another; and both logics are *right*.

Since JC Beall and Greg Restall's (2006) landmark championing of logical pluralism, the position has received much well-deserved attention. Both Beall and Restall's original presentation, and the subsequent discussion, have assumed a commitment to a particular view of logic's normative status, a view I call *logical normativism*. The logical normativist claims, roughly speaking, that logic is inherently normative: the mere holding of a consequence relation between the premises and the conclusion of an argument places a reasoner under normative constraints with respect to the conclusion (assuming that she knows the premises, and that the argument is valid). Normativism is widely assumed in debates about logical pluralism, with varying degrees of explicitness. At the less explicit end of the spectrum, Beall and Restall (2006) commit themselves to something like normativism, though don't give much detail as to how precisely that commitment

ought to be cashed out. At the more explicit end, Colin R. Caret (2016, 7) carefully explains normativism and even goes as far as to claim that ‘the pluralist cannot divorce the normativity of logic from her view’. I’m going to argue that this is exactly wrong. Pluralism without normativism is not only possible, it is a well-motivated and plausible position that readily addresses one of the main challenges to logical pluralism: the normativity objection.

I begin in §1 by explicating both logical pluralism and logical normativism. I then formulate my non-normativist account of logical pluralism by excising the normativist commitment from Beall and Restall’s pluralism. I replace it with a claim about epistemic goals. Rather than logic’s being inherently normative, the non-normativist pluralist sees the normative upshot of consequence relations as deriving from antecedent commitments to epistemic goals.

Before tackling the normativity objection, I show in §2 that separating logical normativism from logical pluralism has a further benefit. In particular, it makes it much easier to see what’s at stake in debates about pluralism, and thereby helps the pluralist avoid the charge of triviality. Roughly, I argue that there are two dimensions along which pluralists and monists can have serious disagreement. The first is about what logic is *for*. The second—once the purpose of logic has been agreed on—is about how *many* logics play that role.

Finally, I turn in §3 to the normativity objection, one of the most influential criticisms of logical pluralism. The challenge for the pluralist is to explain how all of her endorsed logics can successfully impose normative constraints on deliberators. I give a non-normativist response to the objection, though not the one that immediately springs to mind, namely that the objection needn’t faze the normativist since she denies logic’s inherent normative status. While that’s strictly speaking true, it doesn’t help much since I show that a parallel version of the normativity objection can be brought to bear against non-normativist pluralism. The reply I offer instead is for the pluralist to say that which logic she deploys on a given occasion depends on the epistemic goals she is aiming at. I conclude the paper by considering whether the normativist pluralist can adopt a similar line of response.

I suggest that she can, but only by incurring costs that the non-normativist avoids. Nevertheless, if one insists on being a normativist logical pluralist, this is the best way to address the normativity objection.

So let's begin by illuminating a previously unnoticed area of dialectical space: logical pluralism without normativism.

1 Logical Pluralism

Very roughly, *logical pluralism* is the view that there is more than one, equally good relation of logical consequence. There are different ways to be a logical pluralist. In this section, I'll clarify pluralism and then expound the particular version that I wish to defend: non-normativist logical pluralism.

1.1 How to be a pluralist

Logical pluralists hold that there is more than one distinct relation of logical consequence. A useful way of unpacking this is to note that many pluralists about logic are pluralists about something *else*.

(PLU) Pluralism _{α} about logic is (partly) due to pluralism about α .

So different kinds of pluralism result depending on what exactly that other thing is: varying α generates different versions of logical pluralism.

Here are some examples. For Achille Varzi (2002), α ranges over ways of drawing the distinction between logical and non-logical terms. Hence, he is a pluralist about (collections of) *logical constants* and so he is a pluralist_{LC} about logic.¹ Gillian Russell (2008), takes α to be *truth-bearers*, yielding pluralism_{TB}: there are different, equally good relations of logical consequence depending on whether one takes truth-bearers to be propositions, sentences, or something else. Hartry Field (2009a) lets α range over (systems

¹ Strictly, according to (PLU) this should be 'pluralism_{logical constants}', but I'll abbreviate subscripted parameters for less clunkiness in the text.

of) *epistemic norms*. This gives rise to pluralism_{EN} about logic: logical pluralism in virtue of a plurality of epistemic norms. And Carnap (1951) is a pluralist about *languages*, leading to pluralism_L about logic.

Meeting (PLU) is not sufficient for being a logical pluralist. Once she’s specified α , the pluralist needs to say more about whatever it is she takes α to be—demarcations of logical constants, truth-bearers, and so on. In particular, she needs to make plausible the claim that different values of α yield distinct, *equally good* notions of logical consequence. In this way, pluralism is bound up with normative questions: what is it for a consequence relation to be *good*? What would it be for more than one to be *equally good*?

Even though logical pluralism is clearly linked to normative issues, the existing literature fails to tackle them adequately. Part of the reason for this is that it tends to assume that logic *itself* is normative (Steinberger 2017). Call this assumption *logical normativism*.² In this paper, I investigate logical pluralism without making that assumption. Ultimately, I’ll defend a non-normativist version of Beall and Restall’s (2006) pluralism. Before doing so, let me first explain their account.

1.2 Beall and Restall’s pluralism

JC Beall and Greg Restall (2006) take the settled core of logical consequence to be underspecified; pluralism results from different specifications. That core is given by what they call the GENERALIZED TARSKI THESIS (Beall and Restall 2006, 29):

(GTT) An argument is valid _{x} iff in every case _{x} in which the premises are true, so is the conclusion.³

In terms of (PLU), Beall and Restall take α to be admissible sharpenings of the notion of

² I explain logical normativism more carefully below, in §1.3.

³ I’ll move freely between talk of logical consequence and validity, noting that ϕ is a logical consequence _{x} of Γ ($\Gamma \models_x \phi$) just in case the argument from Γ to ϕ is valid _{x} . I’ll also use ‘ x -valid’ as a notational variant of ‘valid _{x} ’.

This is as good a point as any to flag that I’ll be sloppy with the use-mention distinction when doing so only negligibly decreases clarity and lets me avoid a proliferation of (quasi-)quotation marks.

case in (GTT).⁴ This gives rise to logical pluralism_C.

The reason for focusing on Beall and Restall’s pluralism_C is that theirs is the most thoroughly developed version of the view. This is valuable in the present context: because it is best developed, the effects of assuming logical normativism will be easiest to detect. So, from this point onwards, by ‘pluralism’ unqualified I’ll mean pluralism_C: the kind of logical pluralism that results from admitting a plurality of notions of case into (GTT).⁵

1.2.1 Admissible cases

You can’t just plug *any* kind of case into (GTT) and get an acceptable relation of logical consequence. According to Beall and Restall (2006, 14–23), there are three constraints on the types of case that can be admitted. Only cases that meet these constraints yield *genuine* consequence relations. Let Γ and ϕ be the premises and conclusion respectively of a valid argument. Then cases must be such that the relation of logical consequence generated has the following features:

NECESSITY. Necessarily: if every member of Γ is true, then ϕ is true.⁶

FORMALITY. Logical consequence holds between Γ and ϕ in virtue of their form,

⁴ What exactly is a case? I’ll follow Beall and Restall (2006, 89) in taking it to be the kind of entity ‘in which claims may be true’. For instance, cases might be: Tarskian models, situations, or Kripke structures.

⁵ Thus, along with Beall and Restall (2006, 36), I assume a *semantic* or *model-theoretic* conception of logical consequence. Although it has been widely accepted since Tarski’s (1936) influential account, it is not entirely uncontroversial: see Etchemendy (1999), Field (2009a), and Shapiro (2014, 33–36); see Varzi (2002, 212) for a reply to Etchemendy in the context of Varzi’s pluralism_{LC}. There is not scope to pursue this matter here. Rather, the current project is the first step in a larger one: here I consider logical pluralism without logical normativism, *on the assumption of a semantic account of consequence*; I leave generalizing the discussion for further work.

⁶ Occasionally Beall and Restall (2006, 24) make it seem as if NECESSITY is superfluous: ‘Consequence is *necessary* in the following sense—it applies in *all cases*’. This would make NECESSITY redundant because consequence’s applying in all cases is already built into GTT.

One way to save NECESSITY from redundancy is to distinguish between logical necessity on the one hand, and metaphysical necessity on the other (see Burgess 1997). Read as attributing logical necessity, NECESSITY is indeed redundant. But read as attributing metaphysical necessity—the kind of thing that holds at all possible worlds—it’s a substantive constraint. As Etchemendy (1999) argues, holding in all models or cases is not straightforwardly equivalent to holding at all possible worlds. This second reading accords with Beall and Restall’s (2006, 14–16) other glosses of the constraint.

not content.

NORMATIVITY. One errs in accepting each member of Γ while rejecting ϕ .

These require a little unpacking. NECESSITY is partly what distinguishes deductive from inductive consequence; part of what it is for an argument to be deductively valid is for the premises to guarantee the conclusion (Beall and Restall 2006, 15).⁷

FORMALITY is plausible and widely accepted, though it is hard to say precisely what the distinction between form and content is supposed to amount to. Fortunately, I can leave it intuitive for the present purposes. Consider the following arguments:

- (1) Ash is identical to Bailey; Bailey is identical to Cam; therefore, Ash is identical to Cam.
- (2) Dani is taller than Eve; Eve is taller than Finn; therefore, Dani is taller than Finn.

Suppose we're assessing the arguments with respect to validity. We deploy classical, first-order logic with identity, and formalize (1) and (2) as follows (with the obvious assignment of predicates and constants to natural-language predicates and singular terms):

(1*) $a = b; b = c$; therefore, $a = c$.

(2*) $Tde; Tef$; therefore, Tdf .

(1*) is valid. (2*) is not. This is because classical logic takes the identity predicate, but not the 'taller than' predicate, to be a logical constant. So, while identity partly constitutes the logical form of (1), 'taller than' is not part of the logical form of (2). Hence, although there's a clear sense in which (2) is a perfectly good argument, its conclusion does not follow from its premises merely in virtue of form—at least not as far as first-order logic with identity is concerned.

⁷ Important doubts have been raised about NECESSITY. In particular, Hartry Field (2009a,b) deploys Curry's paradox to put pressure on the constraint. And Gillian Russell (2012) criticizes it by considering Kaplan's logic of demonstratives.

I'm not defending the claim that first-order classical logic carves the form-content distinction at the joints. After all, *prima facie* there's nothing to prevent one from adding 'taller than' to the stock of logical constants, and requiring its transitivity on all models, validating (2). But the present aim is just to introduce the distinction; it's sufficient that there's a clear sense in which, relative to first-order logic, (1)'s truth-preservation depends only on its form, whereas (2)'s depends on its content. There is a great deal more to be said. But this intuitive grasp of formality will be enough to be getting on with.⁸

Finally, NORMATIVITY embodies Beall and Restall's commitment to logical normativism. This is precisely what I reject.

1.3 Logical normativism

In §1.1, I characterized logical normativism as the view that logic *itself* is normative. It's time to make that more precise. Specifically, I take logical normativism to be a commitment to the following claim:

(LN) A reasoner's knowing (i) that the argument from premises Γ to conclusion ϕ is valid, and (ii) that each $\gamma \in \Gamma$ is true, places her under a *direct, defeasible* requirement to constrain her beliefs about Γ or ϕ in some corresponding manner.

This needs clarifying in three respects. First, I've tried to construe normativism charitably along two dimensions. On the one hand, I've left plenty of room for the normativist to fill in the details of the view as she best sees fit. For instance, I've left open both exactly what the normative requirement generated by (LN) *is*—a permission, an obligation, etc.—and the constraint that it imposes on the reasoner's beliefs.⁹ On the other hand, where I've had to specify some aspects of logical normativism, I've set a high bar for the

⁸ For more on the notion of logical form, and the closely related notion of a logical constant, see Etchemendy (1999), MacFarlane (2000, 2015), and Sher (1991).

⁹ Although for simplicity I don't make this explicit, I also leave open the precise nature of the doxastic attitude constrained. For instance, a normativist might hold that logic imposes requirements not on full beliefs but on degrees of belief (see Field 2009a,b).

normative requirement to arise. In particular, I’ve couched (LN) in terms of a factive state: knowledge. There are many other ways to explicate normativism.¹⁰ But what I say here ought to apply to other strands of normativism that impose stricter, more specific requirements on belief.

Second, the normative requirement that stems from (LN) is *defeasible*. Suppose a reasoner knows that the argument from P to $P \vee Q$ is valid, and she knows that P . Then according to the normativist she is required to constrain her beliefs with respect to P and $P \vee Q$ appropriately—perhaps she is required not to accept P and deny $P \vee Q$. But this requirement might be trumped by other considerations.

Third, the requirement is *direct*. This is the most difficult aspect of logical normativism to explain, but also the most important for the present purposes. The intuitive idea is that the *logic* is doing the normative work, and not anything else.¹¹ Contrast this with some other discipline, say, thermodynamics. The Second Law has it that the entropy of an isolated system will not decrease over time. Suppose an inquirer knows this, and knows about some isolated thermodynamic system—the mug of coffee that she’s just poured a dash of almond milk into. Is she required *merely by thermodynamics* to constrain her beliefs about the evolution of the coffee-milk system? No. There may be other factors—such as a goal of having only consistent beliefs—that conspire with thermodynamics to place her under some normative requirement. But thermodynamics itself places her under no direct requirement. According to the normativist, logic is not like thermodynamics: logic places a reasoner under *direct* requirements to constrain her beliefs, requirements that do

¹⁰ Florian Steinberger (2017) provides a helpful overview.

¹¹ This isn’t quite right. According to (LN), a reasoner’s knowledge of both the premises and the consequence relation itself also conspire with the logic to generate a normative requirement. I’ll occasionally omit these qualifications to avoid tedious repetition, but that should not be mistaken for an attempt to create a normativist straw man.

It’s unclear whether Beall and Restall (2006) take their normativism to consist in something like (LN), or in the straw-man position that the mere existence of the set $\{\Gamma \models \phi\}$ places reasoners under requirements with respect to believing ϕ , whether or not they know the premises and the entailment relation hold. I’ll interpret them as committed to (LN), rather than the straw-man view, for two reasons. First, they’ve been widely interpreted as such (see Caret 2016). Second, and more importantly, the straw-man position really isn’t plausible, not least because it’s hard to see how NORMATIVITY so understood will preclude unwanted consequence relations. More on this in §1.4 and §3.5.

not need antecedent commitments to epistemic goals to gain normative bite.

It's tempting to cash this directness claim out by saying that the reasoner is placed under the relevant requirement *independently* of her epistemic goals. But this won't do: it counts explicitly normativist views, like Field's (2009a), as *non*-normativist. Recall from §1.1 that Field's pluralism_{EN} arises by way of a plurality of epistemic norms. Without getting bogged down with irrelevant detail, suffice it to say that Field's pluralism_{EN} is such that the requirement the reasoner is subject to is intricately tied to her (or her community's) epistemic goals. Thus the requirement imposed by the logic is *not* independent of her epistemic goals. Nevertheless, Field's view is definitely normativist. So I need some way other than independence to construe directness.

The most natural way is using *in virtue of* claims.¹² The logical normativist takes the normative requirement to arise in virtue of a logical consequence relation. Moreover, this transmission of normativity—from the logic, to constraints on the reasoner's beliefs—is non-derivative: it does not hold in virtue of some *further* normative source.¹³ This is why Field is committed to logical normativism after all. Even though, on his view, the requirements imposed on a reasoner will vary with her epistemic goals, the direct, non-derivative normative source of those requirements are consequence relations.

Logical normativism can seem highly plausible. As Beall and Restall (2006, 16, their emphasis) put it, '[i]n an important sense, if an argument is valid, then you somehow go *wrong* if you accept the premises but reject the conclusion'. That seems correct. Suppose Alex knows that *if it's raining, then it's pouring* and also knows that *it's raining*. Suppose she also knows that the inference from these premises to the conclusion that *it's pouring* is valid. Nonetheless, Alex rejects that *it's pouring*. It seems clear that she is making some

¹² If the reader finds the idiom helpful, think of them as grounding claims. I steer clear of this in the text as the ideology of grounding has taken on complicated metaphysical baggage that isn't of immediate concern (see Fine 2012). But the claims I invoke here needn't trail any heavyweight metaphysics. They can be dealt with however the reader prefers to treat the following explication of utilitarianism: an act is right in virtue of maximizing happiness.

¹³ Contrast the thermodynamics case again. There, any normative role played by thermodynamics *is* derivative, depending on the reasoner's antecedent goals and commitments.

kind of mistake in accepting the premises but rejecting the conclusion of this instance of *modus ponens*.¹⁴

The logical non-normativist denies that logic is normative in the substantive sense just explained (see Harman 1986). Despite this, the non-normativist can agree that Alex errs. So she can agree with the intuition that motivates Beall and Restall’s normativism. But the non-normativist disagrees about the *source* of Alex’s error. On the one hand, the normativist takes the mistake to stem from violating a requirement due to the fact that the consequence relation holds.¹⁵ That’s part of what it means for the normativist to insist on the directness of the requirement. On the other hand, the non-normativist takes the error to stem from violating a requirement that arises from *some antecedent epistemic goal(s)*. Alex goes wrong in rejecting the conclusion of the argument only insofar as this thwarts her epistemic goal(s). For instance, if Alex has the goal of gaining true beliefs, then she makes a mistake.¹⁶ But, the non-normativist insists, the mistake depends on that epistemic goal. Thus the sense in which logic is playing a normative role is indirect and derivative; it is just a tool deployed in pursuit of an epistemic goal.

As well as accommodating the intuition that motivates normativism, the non-normativist can offer a debunking explanation of normativism’s appeal (Harman 1986). Normativism is initially plausible because so often an agent’s epistemic goal(s) are so obvious as to remain implicit. Typically, when one criticizes another for a logical error, one implicitly assumes something like the goal of getting at truth. Because it remains in the background, the

¹⁴ I’ve assumed more about the normative requirements imposed by (LN) than I strictly speaking ought to. But we could modify the case to suit whatever normative requirement the normativist’s preferred specification of (LN) imposes.

In addition, note that there are two kinds of mistake to distinguish here. First, Alex could be making a mistake in the *thin sense*: merely engaging in counterlogical reasoning. Second, she could be making a mistake in the *thick sense*: engaging in counterlogical reasoning and *thereby criticizable*. For reasons similar to those outlined in n. 11, I take Alex’s mistake to be a thick one. If logics earn their stripes when reasoners make thin-mistake violations of them, we’re quickly going to have an abundance of unwanted consequence relations.

¹⁵ And Alex’s knowing that it does, and knowing the truth of premises. See n. 11.

¹⁶ Here I speak loosely about epistemic goals to motivate the view. I have more to say about them in §1.4.1.

normativist overlooks the crucial normative work done by the epistemic goal, erroneously attributing it to the logic itself. It's worth developing this point in more detail.

Suppose Alex performed her counterlogical reasoning on Tuesday. On Monday, she'd been threatened in a rather strange way: 'If you believe the conclusions of any sound arguments tomorrow, your loved ones will be put to death'. Alex had access to a strange drug. She took it on Monday at the stroke of midnight, secure in the knowledge that it would give her exactly one epistemic goal for the next 24 hours: the goal of aiming only at *falsity*.¹⁷ This fanciful backstory serves merely to motivate Alex's acceptance of that epistemic goal.¹⁸ The important point is that *relative to that goal*—no matter exactly how she got it—her refusal to accept the conclusion of the argument is unimpeachable.

Thus the non-normativist takes logic to be on a par with any other kind of well-developed inquiry. Compare chemistry. Logic, like chemistry, is a useful tool for getting at truth. Moreover, like chemistry, logic is not directly normative. One only errs in failing to believe a truth of chemistry insofar as one thwarts one's antecedent epistemic goals; just so, one only errs in failing to believe a truth that falls out of logic insofar as one thwarts one's epistemic goals.

It's worth stressing that I am not officially taking a stand on the normativism versus non-normativism debate. Rather, my aim here is to consider the logical *pluralism* debate through a clear lens—one that doesn't assume normativism. So I take up non-normativism primarily for dialectical purposes. In part this is worth doing because normativism is a controversial thesis.¹⁹ Given this, pluralism will be rendered all the more plausible by freeing it from normativism. But it's also worth considering pluralism without normativism because it will shed valuable light on two of the more interesting issues surrounding logical

¹⁷ Alex's knowledge of the premises of the argument is contrary to this goal, but the drug merely manipulates her goals, rather than, say, her willingness to form beliefs on the basis of perceptual evidence.

¹⁸ I'll have more to say in §1.4.1 about what constraints, if any, there are on epistemic goals. If it turns out that aiming at falsity isn't a genuine epistemic goal, then the case can be modified using one that is.

¹⁹ The non-normativist *locus classicus* is Harman (1986). For an attempt to motivate normativism and to meet Harman's criticisms of the view, see Field (2009b).

pluralism. First, it will help clarify what is at stake in the dispute between pluralists and monists. Second, it will help pluralism meet one of the central objections that has been levelled at it: the normativity objection.

Before turning to these matters, however, I need to formulate my non-normativist pluralism more explicitly. In doing so, I'll elucidate the notion of an epistemic goal.

1.4 Non-normativist pluralism

My non-normativist pluralism excises normativism from Beall and Restall's account. I follow them in taking the core notion of consequence to be settled, but not uniquely, by (GTT). Recall:

(GTT) An argument is valid_x iff in every case _{x} in which the premises are true, so is the conclusion.

I also follow Beall and Restall in constraining admissible cases. But I part ways with them about *which* constraints to impose. Specifically, in rejecting normativism I also reject **NORMATIVITY**: a genuine consequence relation needn't impose a direct normative requirement.

A natural thought is to try and make do with Beall and Restall's other constraints. Perhaps in the absence of normativist commitments, the following two principles suffice to rule out cases that yield unwanted consequence relations:

NECESSITY. Necessarily: if every member of Γ is true, then ϕ is true.

FORMALITY. Logical consequence holds between Γ and ϕ in virtue of their form, not content.

But **NECESSITY** and **FORMALITY** on their own are inadequate. They fail to rule out notions of case that generate unpalatable consequence relations. Suppose that in addition to assigning an extension to a predicate, one also assigns an anti-extension. Then one replaces the usual, classical truth-condition for atomic sentences with something like the following:

$$V(Fa_1 \dots a_n) = \begin{cases} 1 & \text{if the denotation of } a_1 \dots a_n \text{ is in } F\text{'s extension} \\ 0 & \text{if the denotation of } a_1 \dots a_n \text{ is in } F\text{'s anti-extension} \end{cases}$$

The classical truth-condition is recovered if one assumes that F 's extension and its anti-extension are mutually exclusive and exhaustive subsets of a model's domain.

But suppose one drops the exclusivity condition. Then, let a case_{IMP} be a standard, first-order Tarskian model except it's stipulated that in each case_{IMP} the denotation of the constant ' a ' is both in the extension and the anti-extension of the one-place predicate ' F '. Hence ' $Fa \wedge \neg Fa$ ' is true in every case_{IMP} . Cases $_{IMP}$ yield a trivial notion of consequence: any sentence, ϕ , is a consequence_{IMP} of any set of premises, Γ .²⁰

Beall and Restall can appeal to their normativism to rule cases $_{IMP}$ inadmissible. Plugging cases $_{IMP}$ into (GTT) yields a notion of consequence that isn't normative: no one makes a mistake by rejecting the consequence_{IMP} of known premises. Having abandoned normativism, I need to find another way to rule out cases $_{IMP}$.²¹

Colin R. Caret (2016, 7) has recently claimed that this is impossible: 'the pluralist cannot divorce the normativity of logic from her view'. His reasoning is similar to the line of thought just expounded: the pluralist must accept normativism in order to avoid admitting aberrant kinds of case. But this is too quick. The argument shows that NECESSITY and FORMALITY are insufficient for ruling out, say, cases $_{IMP}$. But this does not show that the non-normativist is unable to deploy some *further* constraint to do preclude unwanted cases.

In fact, the key Beall-Restall-Caret insight can be recaptured in a non-normativist framework. Those authors are right to think that normativity plays a crucial role in

²⁰ *Proof.* By explosion, for any ϕ , $Fa \wedge \neg Fa \models_{IMP} \phi$. Moreover, since by definition ' $Fa \wedge \neg Fa$ ' is true in every case_{IMP} , ϕ is true in every case_{IMP} . Hence for any Γ whatsoever, $\Gamma \models_{IMP} \phi$.

²¹ Perhaps cases $_{IMP}$ violate FORMALITY by specifying the truth-values of extralogical expressions: ' a ' and ' F '. Even if that's right, we could generate a structurally similar notion of case by adding a *falsum* logical constant, ' \perp ', to the language.

shaping the space of genuine consequence relations, but wrongly locate its source *in the consequence relations themselves*. Hence their commitments to normativism. By contrast, my non-normativist pluralism shifts the normative burden from the *logic* to the *epistemology*. Thus I substitute Beall and Restall’s third, normativist constraint on acceptable specifications of (GTT) with the following non-normativist constraint:

EPISTEMIC UTILITY. Logical consequence relations are best suited to meeting the core epistemic goal(s) of argumentation.

EPISTEMIC UTILITY rules out cases_{IMP} since there’s no plausible core epistemic goal of argumentation that consequence_{IMP} is most conducive to achieving. Hence, although the notion of a case_{IMP} meets NECESSITY and FORMALITY, it violates EPISTEMIC UTILITY. Consequence_{IMP} is not a genuine consequence relation after all.

EPISTEMIC UTILITY clamors for further explication of epistemic goals, and what it means for one to be a core goal of argumentation. I turn to that now.

1.4.1 Epistemic goals

Epistemic goals are the *raisons d’être* of epistemic activity. They are what belief formation, reasoning, giving testimony, etc., *aim at*. It’s hard to give more detail than this without getting embroiled in controversy. Fortunately, I do not need to do so here. Instead, I’ll supplement this intuitive gloss with some ostension. This will provide enough of a grasp of the notion of an epistemic goal for the present purposes.

Here are three candidate epistemic goals: *truth*, *relevance*, and *demonstrability*. Consider the practice of giving testimony. The success criteria for testifying depend on which epistemic goals are invoked in evaluation. In this way, epistemic goals determine the normative profile of epistemic activities, such as giving testimony. For example:

Ice Cream. Ali and Beata are arguing about whether to order chocolate or vanilla ice cream for dessert. Three people overhear their conversation and step in to provide testimony. Tariq testifies truly that *either Goldbach’s conjecture is true or Goldbach’s conjecture is false*. Raúl testifies truly that *the diner’s chocolate ice*

cream is better than its vanilla. And Delia testifies truly that *the diner's vanilla ice cream is cheaper than the chocolate*, and she produces a price list to demonstrate her claim.

Whose testimony is best? It depends on the epistemic goal or goals. Suppose the goal is truth. Then, since it's stipulated that they all testify truly, the testimonies are all equally good. Suppose the goal is relevance. Then Tariq's truthful, irrelevant testimony clearly falls down. Raúl's testimony does well in achieving this goal, as does Delia's (though hers may turn out to be irrelevant if money is no issue). For obvious reasons, Delia's testimony does best with respect to the goal of demonstrability.²² Moreover, we can ask whose testimony is better with respect to a combination of epistemic goals. Take the combination, *C*, of all three goals: *truth*, *relevance*, and *demonstrability*. Plausibly, Delia's claim best meets *C*. But suppose money is no object for Ali and Beata, making Delia's testimony completely irrelevant. Then there is a plurality of best testimonies with respect to *C*: Raúl's and Delia's are both best.

I've been talking about epistemic goals as if they're the kind of thing an agent gets to pick for herself. She might aim to believe all and only claims that made her laugh; or she might aim to draw the conclusions of all and only arguments in haiku form.²³ While I'm not going to take an official stance with respect to this liberalism about epistemic goals, I also don't want non-normativist pluralism to depend on it. This is because it conflicts with a plausible constitutivist account of epistemic activity (see Field 2000). On such a view, epistemic activities are partly constituted by the goals they aim at. For instance, it may be that an activity that aims at falsity cannot *count* as belief formation; it is *schmelief* formation instead. This is compatible with the pluralism I espouse as long as multiple goals can constitute the epistemic activity at issue: argumentation. There isn't scope to defend this epistemic structure in detail. It seems, however, that argumentation

²² I assume that Tariq's claim cannot be proved constructively. This may turn out to be false, but ignore this wrinkle.

²³ That is, two-premise arguments, such that the first premise and the conclusion both have five syllables, while the second premise has seven.

has disjunctive constitutive goals. Doubtless, some goals are so aberrant that aiming at them precludes agents from counting as reasoning deductively. But an agent who aims at either say, truth-preservation or relevant truth-preservation (or both) is still in the business of argumentation. As long as something like this disjunctive situation holds, the constitutivist can wholeheartedly embrace my version of logical pluralism.

So much for epistemic goals in general. But the epistemic goals of interest here are *core* and *of argumentation*. Let me unpack these qualifications, starting with the latter. Although a logic can be deployed for many uses, the primary purpose is bound up with reasoning or argumentation (Priest 2005, 196). As I hinted at last paragraph, I take argumentation to be something like the activity of reasoning deductively. So the consequence relations generated by (GTT) should earn their keep in meeting the kinds of epistemic goals that are the aim of such activity. This is what it means for an epistemic goal to be *of argumentation*.

There are many epistemic aims for which an agent might engage in argument, however. For instance, I might undertake a piece of reasoning to practice my facility with disjunctive syllogism. But this is not a *core* goal of argumentation. I hope this is intuitive, though a great deal more needs to be said about what exactly makes a goal core or not. For the present purposes, I'll offer the following stipulation: core goals of argumentation are concerned with—though not only with—truth-preservation. When agents reason deductively, it is typically to tease out the true consequences of a set of premises, sometimes under further constraints like relevance or demonstrability. Sometimes an agent knows the premises are true; sometimes the argument is engaged in speculatively, to find out what would follow if the premises *were* true; other times (notably for *reductio*) one or more of the premises are known, or suspected, to be false, and truth-preserving reasoning is employed to derive a contradiction.

With this greater understanding of an epistemic goal, let's return to EPISTEMIC UTILITY. As well as meeting NECESSITY and FORMALITY, admissible cases must yield a consequence relation that meets certain epistemic goals. In particular, genuine consequence relations must be best suited to meeting core epistemic goals of argumentation. It's open

to non-normativist pluralists to appeal to constraints other than EPISTEMIC UTILITY. For instance, one might want to defend a kind of pluralism of necessary, formal consequence relations that are best suited to meeting *any* epistemic goals, whether or not they are core, or of argumentation. My present purpose less concerns defending a particular version of non-normativist pluralism, however, and more aims to vindicate the non-normativist approach to logical pluralism in general. The finer details can be hashed out later. So I'll take EPISTEMIC UTILITY as it comes, and focus on core epistemic goals of argumentation.

For similar reasons to those just given, I'm not going to argue for a particular set of such goals. Rather, I'll assume three of them: truth-preservation, relevant truth-preservation, and demonstrable truth-preservation. Plausibly, each of these goals is met by classical logic, relevant logic, and intuitionistic logic, respectively: the classical consequences of Γ are those claims that are true (in all cases) if each $\gamma \in \Gamma$ is true; the relevant consequences of Γ are those claims that are true if each $\gamma \in \Gamma$ is true, and that are relevant to the members of Γ ; and the intuitionistic consequences of Γ are those claims that are true if each $\gamma \in \Gamma$ is true, and that can be constructively demonstrated.²⁴

A caveat: David Lewis (1988) has argued that relevant logic doesn't in fact capture the notion of relevance. Detailed consideration of this issue would divert us too far from the present concerns, but two things are worth saying. First, Lewis's argument relies on his technical understanding of relevance, an upshot of which is that an arbitrary proposition, P , is relevant to an arbitrary instance of Excluded Middle, $Q \vee \neg Q$. Even if his technical account is correct, however, it is hardly *intuitively* more plausible than the relevant logician's claim that P is *not* relevant to $Q \vee \neg Q$. And for now, this is all I need.

Second, even if relevant logic isn't in fact best suited to meeting the goal of relevant truth-preservation, this doesn't detract from the main aims of the paper. Those are to put non-normativist pluralism on the dialectical table, to clarify what's at stake in the

²⁴ Two clarifications are required. First, my view doesn't depend on any of these logics in fact being the correct logic of the corresponding epistemic goal. If, say, Strong Kleene logic does the job of truth-preservation better than classical logic, then so be it; I'll endorse that logic for that goal.

Second, many different logics go by 'relevant logic'. I mean by that name the logic that Beall and Restall (2006, 49–59) obtain by substituting situations for cases into (GTT).

pluralism debate, and to reply to the normativity objection against logical pluralism. All this can be achieved even if the precise version of pluralism outlined here ultimately needs tweaking. So let's set scruples aside and press on.

1.4.2 Pluralism without normativism

Beall and Restall (2006, 38–70) have shown that (GTT) generates classical logic, relevant logic, and intuitionistic logic by letting cases be standard Tarskian models, situations, and stages in Kripke-structures, respectively. Thus, on two assumptions, my non-normativist version of pluralism endorses the same logics as Beall and Restall's normativist account.²⁵ The assumptions are: first, that truth-preservation, relevant truth-preservation, and demonstrable truth-preservation are the core epistemic goals of argumentation; and, second, that the logics best suited to meeting those goals are classical logic, relevant logic, and intuitionistic logic, respectively.

Even though my version of pluralism is coextensive with Beall and Restall's, it is importantly different. It differs precisely in not assuming logical normativism. On both views, normativity plays a role in constraining the admissible instances of (GTT), but the accounts disagree on the *source* of the normativity. According to Beall and Restall, it is the logics themselves; according to non-normativist pluralism, it is the epistemic goals. One might have misgivings about whether there is really any difference between these positions. In §3, I'll argue that the non-normativist pluralist has an easier time responding to a key objection. But even if that weren't the case—even if normativist and non-normativist pluralism have exactly the same downstream implications—there's still a crucial disagreement here. It's a dispute about how the constraints logics impose on reasoners get their normative force—about, in other words, the very structure of the

²⁵ Strictly, Beall and Restall's (2006, 29) pluralism is an existential claim: 'at least two different instances of (GTT) provide admissible precisifications of logical consequence'. So their account is compatible both with one of the three logics they discuss *not* stemming from an admissible notion of case, and with *other* sharpenings of 'case' yielding still further logics. Since they give them so much attention and since it eases exposition, however, I'll sometimes write as though they are committed, and only committed, to classical, relevant, and intuitionistic logic.

I discuss the prospects for endorsing consequence relations other than these in §3.5.

epistemic normativity.

As I just mentioned, bringing out this difference will make it easier to solve a problem that plagues Beall and Restall's pluralism: the normativity objection. But before that, it's worth highlighting another benefit of distinguishing logical pluralism—the view that there is more than one distinct relation of logical consequence—and logical normativism—the view that logic itself has substantive normative status; doing so helps clarify what's at stake in the pluralism debate.

2 What's at Stake

It's not easy to pin down what's supposed to be at stake in debates about logical pluralism. Monists often start their criticism of pluralism by observing that of course there's a *sense* in which they're 'pluralists' about logic; but they demur when asked to accede to some *stronger* notion of pluralism that the card-carrying pluralists adhere to.²⁶ Distinguishing logical pluralism from logical normativism sheds important light on this issue. Let's start with a taxonomy that does not presuppose normativism.

2.1 A taxonomy of monisms and pluralisms

In §1.1, I suggested that the following schema is a useful way of approaching the variety of logical pluralisms on offer:

(PLU) Pluralism _{α} about logic is (partly) due to pluralism about α .

As I explained, taking α to range over things like truth-bearers, demarcations of logical and nonlogical constants, and admissible sharpenings of (GTT), results in different versions of pluralism.

²⁶ Graham Priest (2005, 194–196) exemplifies this tendency. To be fair to Priest, he is clearer than most authors (both monists and pluralists alike) about what he takes to be at issue in the debate about pluralism. His discussion draws on several useful, but idiosyncratic, distinctions that it would take us too far afield to delve into here. Suffice it to say that even his gloss on the issue can be usefully augmented by the considerations I'm about to expound.

I still maintain that (PLU) provides a good way into the pluralism debate. But, when it comes to highlighting what’s at stake in the debate, a more useful taxonomy is generated by focusing on what logic is *for*. To illustrate, assume that logic is primarily for meeting the core epistemic goals of argumentation. Then there are *two* parameters to consider: first, how many goals there are; second, how many logics are best suited to achieving them. This generates the following dialectical space.²⁷

	One goal	Many goals
One logic	<i>Narrow logical monism</i>	<i>Wide logical monism</i>
Many logics	<i>Narrow logical pluralism</i>	<i>Wide logical pluralism</i>

Because these distinctions are not made in the literature, it’s hard to give clear examples of each position. But some tentative taxonomizing will be instructive nonetheless. Priest (2005, 196) claims that the ‘canonical’ application of logic is to ‘reasoning’ and that only one logic—the logic of paradox—is best suited to fulfilling that goal. This makes Priest a narrow logical monist. It’s probably fair to think of Quine (1986) as a narrow monist too: the core goal that logic aims at is the regimentation and articulation of scientific theories, and first-order logic is the best for that task.²⁸

As far as I can tell, wide logical monism is not a currently defended view.²⁹ There’s no principled reason why this should be the case, however. There’s nothing to stop it turning out that *one* logic is best suited to meeting *many* core epistemic goals of argumentation. It may be that one and only one logic trades off best against each goal, or that one and only one logic best meets each goal without needing trade-offs at all.

What about the pluralists? Gillian Russell (2008) is a narrow logical pluralist. She

²⁷ Shapiro (2014, 14–15) draws similar distinctions to mine. But he neither uses them to elucidate what’s at stake in the pluralism debate, nor notes that they can be drawn without assuming logical normativism.

²⁸ According to my exposition in §1.4.1, theory characterization is not a core epistemic goal of argumentation. Quine nevertheless counts as a narrow monist because he takes logic to be primarily for one thing, even if that’s not meeting the kind of epistemic goal I’m focused on here.

²⁹ At least, I don’t know of anyone that defends it *qua* monism. It may be that many logicians are implicitly wide monists.

takes logic to serve the core goal of truth. But she argues that more than one logic is best suited to meeting this goal, depending on one's choice of truth-bearers.

Finally, both Hartry Field (2009a) and Beall and Restall (2006) are wide logical monists.³⁰ They take there to be both a plurality of epistemic goals and of logics best suited to meeting them, at least in principle. It's worth noting that they're wide pluralists in different ways: Beall and Restall claim that the different epistemic goals are best served by exactly *one* logic each; whereas Field (2009a, 356) allows that, for *one and the same goal*, more than one logic may be best suited to meeting it. This distinction within wide pluralism needn't be of present concern, but it underscores the fact that the taxonomy is simply meant to carve the dialectical space in a way that helps draw out what's at stake in the pluralism debate. It is meant neither to be exhaustive, nor the best taxonomy of logical monisms and pluralisms for any purposes whatsoever.³¹

2.2 The payoff

The point of all this taxonomizing is that it clarifies what's at stake in the logical pluralism debate. At the beginning of the section I distinguished between two different senses of pluralism: one which monists are happy to go along with, and one which they're not. The former sense—the trivial one, which monists are happy to accept—is a sense of pluralism about which logics are best suited to goals that are either *non-core*, *non-epistemic*, or *not of argumentation*.³² The stronger sense—the substantive one, from which monists recoil—is

³⁰ This is the natural way to read Beall and Restall. Recently, however, Beall (ms.) has defended logic's primary role as being a universal closure operator, characterizing his and Restall's pluralism as 'a pluralism about mostly extra-logical entailment relations'. In his manuscript, first-degree entailment is the one true logic, since only performs the universal closure operator role. Hence Beall, one of the best-known expositors of logical pluralism, turns out to be a narrow logical monist. If this is right, Beall and Restall's 'pluralism' turns out to be much less interesting than it first appeared. I have my doubts, however, mainly because it seems unlikely that the intuitive notion of consequence is as thin as that of a necessarily truth-preserving universal closure operator.

³¹ For instance, Carnap's pluralism_L does not fit easily into the taxonomy. See further §1.1 of this paper and Carnap (1951).

³² There are other trivial senses of pluralism. For instance, 'pluralism' arises in virtue of distinct but equivalent axiomatizations of one and same logic. But it seems to me that the trivial notion of pluralism I highlight is the one that monists most often deploy to muddy the waters in the pluralism debate.

a sense of pluralism according to which logics are *core*, *epistemic*, and *of argumentation*.

Once again, it's instructive to consider Graham Priest's position. Despite being a staunch monist (a narrow logical monist, in terms of the recent taxonomy), he admits that certain distinct logics, such as Boolean algebra and Lambek calculus, 'can be applied for many purposes, such as simplifying electronic circuits, or analysing certain grammatical structures' (Priest 2005, 195). But what makes Priest a *monist*, what makes him shy away from the substantive notion of pluralism, is his commitment to the thought that, once the core epistemic goal of argumentation is settled, only one logic is best suited to meet it.

This shows why the debate between logical monists and pluralists is not a trivial one, as is sometimes charged.³³ There are two dimensions of serious disagreement. The first is about what logic is *for*—what the core epistemic goals of argumentation are; the second is about whether more than one logic fulfils that role. Neither of these dimensions is trivial, in the sense of having an answer entailed by uncontroversial prior commitments. Moreover, neither dimension is obvious, in the sense of having a clear, intuitive answer.

In particular, the dialectical space is such that whether there are one or many goals of argumentation (and what they *are*, exactly) is a live, contested issue. Moreover, the possibility of both narrow logical *pluralism* and wide logical *monism* shows that whether there is more than one logic is not straightforwardly settled by the number of core epistemic goals of argumentation. So a pluralist cannot justify her position by a mere appeal to a plurality of epistemic goals; it may be that one and only one logic best meets them *all*. The pluralist should be pleased to incur this dialectical burden, however. It helps establish her view as a non-trivial contribution worthy of further discussion.

All of this should be obvious. But it's not. These dimensions of what's at stake over logical pluralism are greatly obfuscated by the assumption of logical normativism in the current literature.³⁴ If one is a normativist, the epistemic goals of argumentation tend to

³³ Roy T. Cook (2010) provides a good overview.

³⁴ More precisely, they're obfuscated both by the assumption of logical normativism and the failure to recognize the work that the assumption does.

get relegated to the background, since it's presumed that the logics themselves are playing the key normative role. But then it's easy to lose one's grip on the distinction between the trivial and the substantive senses of pluralism that were just teased apart, and thereby on what's at stake in the debate about logical pluralism. In particular, it's hard to see what the substantive sense of pluralism is supposed to amount to, over and above the trivial sense. Why, for instance, is a commitment to Boolean algebra for certain electrical purposes innocuous, but a commitment to intuitionistic logic for certain argumentative purposes invidious? With normativism firmly entrenched, this question is tricky to answer, so it's difficult to escape the feeling that the whole logical pluralism debate really is just verbal, or otherwise trivial. After all, aren't the electrical engineer who makes a mistake according to Boolean algebra, and the reasoner who makes a mistake according to intuitionistic logic, just as culpable in violating the normativity of their respective logics?

That's all wrong. And it's wrong largely because of logical normativism. It's not that a commitment to normativism entails this confusion about what's at stake. But, as a matter of contingent, empirical fact, normativism does seem to have contributed to the lack of clarity in the literature, and for exactly the kind of reason sketched in the previous paragraph: normativism can obscure what logic is for, and thereby what it would mean for there to be more than one logic that does whatever that is.

So, clearly separating logical pluralism from logical normativism helps shed light on what's at stake in debates about the former. The pluralist and monist's disagreement is most striking when they agree on the core epistemic goals of argumentation, and yet disagree about how many logics best meet them. But there can also be substantive disagreement when the pluralist and monist disagree *both* about what logic is for and about how many logics are best suited to achieving that.

I turn now to another important issue in the logical pluralism debate: the normativity objection. It is also made more tractable by distinguishing normativism from pluralism.

3 The Normativity Objection

As I explained in §1.2, Beall and Restall’s adherence to logical normativism helps them prevent (GTT) from overgenerating consequence relations. But their normativist commitment has been exploited by one of the main objections to logical pluralism: the normativity objection. In this section, I’ll do five things. First, I’ll outline the objection as it is usually presented. Second, I’ll formulate a more powerful version of the objection. Third, I’ll show how a parallel objection also threatens non-normativist pluralism. Fourth, I’ll give a non-normativist reply to the objection. Finally, I’ll revisit normativism and consider whether the normativist can successfully adopt my non-normativist response to the objection. I’ll argue that she can, but only by incurring costs the non-normativist avoids.

3.1 The original version

Beall and Restall’s pluralism assumes normativism. The normativity objection exploits this. It is usually presented along the following lines.³⁵ Take a version of pluralism that endorses a set of logics \mathcal{L} with the following property: one of the logics in \mathcal{L} is *strictly strongest*.³⁶ Let K_1 be the strictly strongest logic, and suppose K_2 is some other logic the pluralist endorses. Now take an inference from α to β such that $\alpha \models_{K_1} \beta$ but $\alpha \not\models_{K_2} \beta$.³⁷ The next step is to ask what Read (2006, 194) calls ‘the central question of logic’: should one conclude that β is true or not? Since K_1 gives a determinate answer about β ’s truth, but K_2 does not, the former logic better answers the crucial question. Moreover, since K_1 is strictly stronger than K_2 , the former will always give at least as good an answer as the

³⁵ The objection is due to Gary Kemp, Graham Priest, and Stephen Read. Beall and Restall (2006, 94, n. 7) attribute the objection to Kemp and Read in discussion in 2000. Read’s 2006 paper credits the core of the objection to a 1999 manuscript of Priest’s ‘Logic: One or Many?’.

³⁶ K_i is the strictly strongest logic in \mathcal{L} just in case it is strictly stronger than all the other logics in \mathcal{L} : $K_i \in \mathcal{L}$ and for any other $K_j \in \mathcal{L}$, for all Γ, ϕ (if $\Gamma \models_{K_j} \phi$, then $\Gamma \models_{K_i} \phi$), and for some Δ, ψ ($\Delta \models_{K_i} \psi$ and $\Delta \not\models_{K_j} \psi$).

³⁷ The existence of such an inference is guaranteed by K_1 ’s being strictly stronger than K_2 . See n. 36.

latter—and sometimes a better one. Thus, K_2 can be jettisoned in favor of K_1 . The final blow: since K_1 is the pluralist’s strictly strongest logic, this line of reasoning generalizes to every other logic in \mathcal{L} . The result is what Caret (2016) aptly calls the ‘collapse of logical pluralism’ into monism; the pluralist in fact endorses only one logic, namely K_1 .

As it stands, the objection has three lacunae. First, it relies on the pluralist endorsing a strictly strongest logic. Second, it construes the normative requirement imposed by logic in a particularly strong form: one should draw the conclusion of a valid argument. Third, it seems to assume that the pluralist is committed to *narrow* logical pluralism. After all, the objection hinges on the pluralist’s answer to what is putatively *the* central question of logic.

The pluralist can avoid the original objection by appealing to any one of these limitations.³⁸ She is not off the hook yet, however. New versions of the normativity objection can be formulated that retain its spirit while blocking these escape routes. I’m going to focus on a version that still assumes that the pluralist has a strictly strongest logic. This is because both Beall and Restall’s pluralism and my non-normativist pluralism in fact endorse such a logic: classical logic. But before focusing on a version that assumes a strictly strongest logic, it’ll be instructive to glance first at the normativity objection in its most general form.

3.1.1 The general version

The most general version of the normativity objection runs as follows.

- (3) *Normativism*. Logic is normative.
- (4) One and only one logic is normative.
- (5) *Monism*. Therefore, there is one and only one true logic.

³⁸ The first way out of the objection has been noticed by Rosanna Keefe (2014), who raises doubts about its ultimate success. The second is discussed by Colin Caret (2016), who shows that the objection still needs answering on more plausible construals of the normative constraints imposed by logic. The third *may* be how Beall and Restall (2006, 94) themselves try to respond to the normativity objection. Lacking the narrow-wide distinction, however, it’s neither clear exactly what their move is, nor its plausibility. I discuss this further in §3.5.

This version of the objection lacks the limitations of the original version. It applies no matter the structure of the logics the pluralist endorses, no matter how she construes the normative requirements they impose, and to wide as well as narrow pluralism. But this gain in applicability saddles the general version with a concomitant drawback: (4) is a substantive, controversial premise that requires much support. As far as I'm aware, no monist arguments for a claim as general as this have been presented. In their absence, it's hard to see why the pluralist can't simply deny (4).

For this reason, I turn now to a new version of the normativity objection. It's more specific than this general version in assuming that the pluralist endorses a strictly strongest logic.³⁹ But it's more general than the *original* version, and so cannot be avoided as easily.

3.2 The new normativity objection

The new version of the normativity objection is closely related to the original Kemp-Priest-Read formulation, but has broader applicability. Spelling it out will require elucidating the concept of *normative work*.

Recall the normativity constraint on admissible cases of (GTT) from §1.2:

NORMATIVITY. One errs in accepting each member of Γ while denying ϕ .

A genuine consequence relation is one that arises from a notion of case that meets the three constraints, including NORMATIVITY. A logic does *normative work* when: (i) it meets NORMATIVITY, and (ii) the normative requirements it imposes cannot be explained by another logic that is endorsed.

Now we can run the new version of the objection. For the sake of concreteness, suppose that the pluralist's strongest logic is classical logic. Call it *CL*. Moreover, suppose she also endorses relevant logic—call it *R*. Suppose she knows that *P* is true. Moreover she

³⁹ It's worth underscoring this advantage that the general version has over both the original Kemp-Priest-Read and my new formulation of the normativity objection. But, as it happens, pluralists tend to endorse a strictly strongest logic and so the gain in generality of this construal is in practice dialectically neutral.

knows both that $P \models_{CL} Q \vee \neg Q$ and that $P \not\models_R Q \vee \neg Q$. Should she reject $Q \vee \neg Q$?⁴⁰ The Kemp-Read-Priest intuition is: no! The pluralist should not reject $Q \vee \neg Q$, because it is entailed by one of her endorsed logics and a premise she knows. But notice that it seems R is doing no normative work in this instance: CL imposes a normative requirement that must be met regardless of R 's verdict.

Since CL is strictly stronger than R , this point generalizes. For any Γ, ϕ , whenever $\Gamma \models_R \phi$, $\Gamma \models_{CL} \phi$. So it's never the case that $\Gamma \models_R \phi$ and $\Gamma \not\models_{CL} \phi$. But then there's no opportunity for R to do normative work. There are no normative requirements imposed by R that aren't already explained by CL .⁴¹ And now it's hard to resist the thought that R is normatively inert: if it's not doing any normative work, it's normative in name only. This means R is not a genuine consequence relation after all: the notion of case that it stems from fails to meet Beall and Restall's normativity constraint on admissible instances of (GTT).

The objection generalizes further still. Since CL is the pluralist's strictly strongest logic, by similar reasoning to the above it can do *all* the normative work. So it is the only genuine consequence relation that meets **NORMATIVITY**. By Beall and Restall's lights, (GTT) yields monism.

It's worth setting this out more precisely. As before, let \mathcal{L} be the set of logics that the pluralist endorses, and K_1 the strictly strongest logic in \mathcal{L} .

- (6) *Normative work.* To count as a genuine consequence relation, a logic in \mathcal{L} must do normative work. It must meet **NORMATIVITY** in a way that is not explained by another member of \mathcal{L} .

⁴⁰ Here I attribute a specific normative requirement to the normativist—something like ‘If an agent knows that Γ entails ϕ and each $\gamma \in \Gamma$ is true, she shouldn't reject ϕ ’. This is to help exposition, but the more careful formulation of the argument I'll expound shortly won't rely on any particular requirement.

It's also worth noting the shift from the requirement being *accepting* the conclusion in the original version of the normativity objection, to *not rejecting* it in my new formulation. This is to bring the requirement more in line with what normativists have in mind. As Harman (1986, 12) pointed out, having to accept the conclusions of known premises leads to ‘clutter[ing] one's mind with trivialities’. Changing the requirement to non-rejection avoids this issue (Field 2009b).

⁴¹ I'm going to argue in §3.4 that this is precisely the point at which the normativity objection fails. But grant it for now to see how, once this initially plausible step is accepted, monism ensues.

- (7) *Strict strength*. K_1 is strictly stronger than the other members of \mathcal{L} .
- (8) *Normative dominance*. Since K_1 is strictly stronger than the other members of \mathcal{L} , it is the only member of \mathcal{L} that does normative work.
- (9) *Monism*. Therefore, by (6) and (8), K_1 is the only genuine consequence relation; there is one and only one true logic.

This new version of the normativity objection neither saddles the pluralist with a particular conception of the normative requirement imposed by logic, nor assumes that she is a narrow logical pluralist. Any pluralist who endorses a strictly strongest logic must respond to the objection.

3.3 No easy way out

While I'm going to argue that the non-normativist pluralist can address the normativity objection—and better than the normativist can—it's not as easy as it might look.⁴² It's tempting to think that, because the objection, even in its new version, relies on normativism, it simply fails to apply to the non-normativist. In a sense that's true: the version just formulated doesn't threaten non-normativist pluralism. But that's cold comfort, since a parallel objection can be made that doesn't rely on normativism.

Instead of normative work, consider the concept of *epistemic work*. Recall the non-normativist constraint on admissible cases:

EPISTEMIC UTILITY. Logical consequence relations are best suited to meeting the core epistemic goal(s) of argumentation.

A logic does *epistemic work* when: (i) it meets EPISTEMIC UTILITY, and (ii) does so in a way that can't be explained by another logic that is endorsed.

- (6*) *Epistemic work*. To count as a genuine consequence relation, a logic in \mathcal{L} must do epistemic work.

⁴² I consider how the normativist might respond to the objection in §3.5.

(7*) *Strict Strength*. K_1 is strictly stronger than the other members of \mathcal{L} .

(8*) *Epistemic dominance*. Since K_1 is strictly stronger than the other members of \mathcal{L} , it is the only member of \mathcal{L} that does epistemic work.

(9*) *Monism*. Therefore, by (6*) and (8*), K_1 is the only genuine consequence relation; there is one and only one true logic.

So there's no easy way out for the non-normativist pluralist. She's vulnerable to a close relative of the normativity objection. It exploits the fact that she endorses a strictly strongest logic, and contends that *that* logic does all the epistemic work. Because of this, the objection goes, the non-normativist's weaker logics are not genuine consequence relations after all.

3.4 Responding to the normativity objection

The non-normativist should respond by rejecting (8*)—epistemic dominance. Just because one of her logics is strictly strongest does *not* mean that it is the only member of \mathcal{L} that does epistemic work. Let's reconsider the previous example. The pluralist knows that P , and that both $P \models_{CL} Q \vee \neg Q$ and $P \not\models_R Q \vee \neg Q$. Should she reject $Q \vee \neg Q$? The non-normativist answer is: it depends on the goal! If the goal is truth-preservation *simpliciter*, she shouldn't reject the conclusion, since classical logic is best suited to meeting that goal; but if the goal is *relevant* truth-preservation, then plausibly she may reject $Q \vee \neg Q$. This is because relevant logic is best suited to meeting *that* goal, and the conclusion is not relevantly entailed by the premise.

The broader point is that weaker logics can do epistemic work. This is true even when the weaker logic agrees with the strongest about an inference's validity. Suppose the pluralist knows that P and that: $P \models_{CL} P \vee Q$ and $P \models_R P \vee Q$. Both classical and relevant logic do epistemic work here, the former toward achieving the goal of truth-preservation, and the latter toward the goal of relevant truth-preservation. So epistemic dominance is false. Because of that, the epistemic-work version of the normativity objection fails.

Before revisiting normativist pluralism in the light of this discussion, two points are worth bringing out. The first is to insist that, according to my non-normativist pluralism, there is no hint of *relativizing* logical consequence to a reasoner's goals. $Q \vee \neg Q$ is a classical consequence of P ; it is *not* a relevant consequence of P . Period. This is true regardless of a reasoner's goals. *Her* goals do not determine consequence relations. Rather, the core epistemic goals of argumentation determine consequence relations. It may be that *wielding* one logic or another is more or less appropriate, given a deliberator's particular goals. But that doesn't change the structure of logical space; the validity of arguments is not subject to the whims of reasoners.

The second point to consider is the narrow logical pluralist's situation. I defended non-normativist pluralism by rejecting epistemic dominance. And I did that by appealing to the variety of epistemic goals my version of pluralism adopts. Clearly the narrow pluralist cannot deploy the very same strategy since she accepts only *one* goal. So she has to find some other way for her weaker logics to do epistemic work, to meet EPISTEMIC UTILITY in a way not explained by her strongest logic. I confess to not seeing an easy way to do this.⁴³ If all the candidate logics are supposed to meet one and the same goal, it seems that the strongest one does so *best*. Then the weaker logics are to be jettisoned after all, and monism ensues.

I'll leave it to the narrow logical pluralist to defend her view more carefully, but one line of response is to reject a presupposition of the objection. She might be able to avoid monistic collapse if none of her endorsed logics is strictly strongest. Suppose $\mathcal{L} = \{K_1, K_2\}$ such that neither K_1 nor K_2 is strictly strongest. Hence for some Γ, ϕ , $\Gamma \models_{K_1} \phi$ and $\Gamma \not\models_{K_2} \phi$; and for some Δ, ψ , $\Delta \models_{K_2} \psi$ and $\Delta \not\models_{K_1} \psi$. In this situation, the pluralist could maintain that both K_1 and K_2 are best suited to meeting her goal. There are ways for the monist to push back.⁴⁴ But delving into them, or possible narrow

⁴³ At least not when the pluralism at issue is about sharpenings of 'case' in (GTT). Other kinds of logical pluralist may have more success on this front. For instance, Gillian Russell (2008) could appeal to the plurality of truth-bearers she endorses to ensure that different consequence relations do epistemic work, even when they only aim at one goal.

⁴⁴ Notably, to argue that K_3 is the one true logic, where $\Gamma \models_{K_3} \phi$ just in case either $\Gamma \models_{K_1} \phi$ or $\Gamma \models_{K_2} \phi$

pluralist responses, is beyond the present scope. For now, note that if this is right—if this is the best narrow pluralist response to the normativity objection—the viability of narrow logical pluralism is bound up with not endorsing a strictly strongest logic.

3.5 Normativism revisited

The non-normativist has an easy response to the normativity objection.⁴⁵ She rejects epistemic dominance: just because one of her logics is strictly strongest does not mean that her other logics fail to do epistemic work. I conclude by revisiting normativist pluralism. In particular, can the normativist respond to the normativity objection by rejecting the parallel premise, namely normative dominance? She can, though in doing so she has to incur costs that the non-normativist avoids.

As I've sharpened it, the Kemp-Priest-Read intuition is that the normativist pluralist's strongest logic does all the normative work. This leaves her weaker logics normatively inert and so to be discarded. But why can't the normativist run a similar line of response to the non-normativist one just given? That example again: the pluralist knows that P and that P classically, but not relevantly, entails $Q \vee \neg Q$; the issue is whether she should reject the conclusion or not. Perhaps she can say that she may reject $Q \vee \neg Q$ *as far as relevant logic is concerned*, but she should not reject it *as far as classical logic is concerned*.⁴⁶ There may be no fact of the matter here as to whether she should reject $Q \vee \neg Q$, all logics considered.

Moreover, when both the normativist's strongest logic and a weaker logic *agree* on the validity of an argument, it's not clear that the strongest logic is taking on the entire normative load, thereby leaving no work for the weaker logic to do. Perhaps instead

(or both).

⁴⁵ More accurately, to the epistemic-work version of the objection that exploits EPISTEMIC UTILITY rather than NORMATIVITY. I won't be careful to distinguish these in the text, since context will make it obvious which I mean.

⁴⁶ This may be what Beall and Restall (2006, 94) have in mind in their response to the original version of the normativity objection. They invoke a 'plurality in the notion of *entitlement*' (their emphasis). Even if it is, however, they're not clear about source of distinct entitlements.

both logics impose normative requirements: the situation is normatively overdetermined. Compare an action that is deemed right by both Kantian and utilitarian considerations. Utilitarian, or Kantian, demands are not thereby rendered inert. Similarly, the normativist pluralist might say, weaker logics still impose requirements on reasoners, even when similar requirements are *also* imposed by stronger logics.

This line of response is available to the normativist pluralist. I prefer the non-normativist reply to the objection, for two reasons. I'll explicate them and then argue that, *if one insists on being a normativist*, this is the best reply to the objection. In particular, it is better than Colin Caret's (2016) contextualist response.

The first reason why the non-normativist reply is preferable is that the normativist is committed to making implausible mistakes. Consider again the (by now all too familiar) question of whether she should reject the conclusion of the argument from P to $Q \vee \neg Q$. Suppose the normativist pluralist has embraced my suggested response to the normativity objection: she shouldn't reject the conclusion of the argument according to classical logic, but relevant logic leaves open the possibility; there's a plurality in the 'should', according to the normativist. Now, in order to avoid monistic collapse, the normativist must allow a deliberator to be sensitive to the disagreement between her logics on an occasion like this. In turn this requires being guided by the argument's relevant invalidity to (potentially) reject the conclusion. But if the pluralist rejects the conclusion, she's made a *mistake* by the lights of classical logic. This mistake may be excusable, or justifiable by other considerations, but it is a mistake nonetheless.

The non-normativist pluralist's reply to the objection circumvents this issue. Such a pluralist can retain the univocality of 'should'. Although whether she should reject the conclusion of an argument might vary with her epistemic goals, the meaning of 'should' remains constant: the non-normativist pluralist should *simpliciter* deploy the logics that best meet her goals. Moreover, the non-normativist avoids having to attribute a mistake of any kind—even an excusable one—to a reasoner who rejects concluding $Q \vee \neg Q$ from P because she aims at relevant truth-preservation. It's not that she can ignore classical logic, which is best suited to achieving truth-preservation *simpliciter*. Rather, it's that if

that isn't one of her goals, then the classical validity of the argument doesn't even need to feature in her deliberative process.

At this point the normativist might object along the following lines: sometimes epistemic life is hard, and you find yourself in a bind. One of your logics pulls you in one direction, another logic in a different direction. Whichever way you go, you'll make a mistake. But this is no objection to normativism; it's just a reflection of the possibility of getting oneself into an epistemic dilemma. Moreover, the objector presses, won't the non-normativist sometimes get in epistemic dilemmas when more than one goal is at play, and they conflict? Demonstrable truth-preservation and relevant truth-preservation won't always align, for instance.

The last point is well taken. Sometimes even the non-normativist may be vulnerable to epistemic dilemmas.⁴⁷ So the reason for preferring non-normativism is not that being in such an epistemic bind is always disastrous. Rather, it's that normativism gets reasoners into predicaments in implausible ways. When I'm focused on demonstrable truth-preservation I don't face a *dilemma* in deliberating whether to reject the classically valid conclusion of an intuitionistically invalid argument. Instead, it seems there are no requirements placed on me by classical logic at all, since the epistemic goal that it best meets is not one of the aims of my present deliberation. Non-normativist pluralism allows this intuition to be neatly captured.

The second reason for preferring the non-normativist reply to the normativist's imitation is that the latter requires an appeal to epistemic goals anyway. Given this, the non-normativist's position has greater theoretical economy: it rebuffs the normativity objection without attributing substantive normative status to logic. Let me explain.

Beall and Restall rely on normativism to rule out gerrymandered notions of case that generate unpalatable notions of logical consequence from (GTT). But, as I just argued, in order to avoid the normativity objection, the normativist pluralist must say

⁴⁷ Note that in these cases the non-normativist can offer a satisfying explanation of why she's in a dilemma: she's aiming at multiple epistemic goals, which conflict.

that reasoners are on occasion permitted to ignore the requirements imposed by one of their logics; otherwise it's hard to see how their weaker logics do normative work. And it's only a small step from there to conceding normative dominance and thereby succumbing to the objection. This raises a problem, however: in virtue of what is classical logic *normative*, when its requirements can be ignored? To put the issue another way, recall cases_{IMP} from §1.4. Such cases yield a completely trivial notion of consequence: any ϕ is a consequence_{IMP} of any Γ whatsoever. But now what's to stop consequence_{IMP} from counting as a genuine consequence relation, the normative requirements of which are often violated? Consider the argument from P to Q . $P \models_{IMP} Q$ and $P \not\models_{CL} Q$. A reasoner who accepts P while rejecting Q makes a mistake by the lights of consequence_{IMP} . No doubt this mistake is excusable or justifiable on various grounds. But the normativist presumably wants to say more than this. She wants to *rule out* consequence_{IMP} , not concede that it is a genuine consequence relation, the requirements of which are often overruled.

There are two options for the normativist pluralist here. Either she finds a non-question-begging way of explaining why classical logic is normative but the trivial logic IMP is not. Or she admits that *NORMATIVITY* fails to rule out gerrymandered cases, leaving her with an overabundance of consequence relations. In personal correspondence, JC Beall has suggested that he's sympathetic to the second move: relying on a very weak normative constraint that allows consequence relations to multiply. If the normativist is willing to embrace this cost, then so be it. But a pluralism that doesn't have to endorse trivial consequence relations is much more attractive. To defend such a view, the normativist has to take the first option and draw a principled distinction between normative and non-normative consequence relations.⁴⁸

The most convincing way to do so is to appeal to epistemic goals. Mistakes that violate

⁴⁸ Note that I'm merely demanding a *criterion* of a logic's normativity here, not an analysis or a reduction. This means I'm not begging any questions against the normativist; that there are criteria for distinguishing genuine, normative consequence relations from non-normative ones is straightforwardly compatible with logic's being fundamentally normative.

classical, relevant, and intuitionistic logic are important in a way that the mistakes that violate *IMP* are not. Reasoners who commit the former are critizable in various ways; reasoners who commit the latter are not.⁴⁹ This is because the former logics are best suited to meeting important epistemic goals—the core goals of argumentation—whereas *IMP* is not. I have little objection to this line of response except that nothing is gained by insisting on normativism. The constraint that rules out unacceptable notions of case turns out to concern epistemic goals, not the inherent normative status of logic. Given this, far from being an integral part of the pluralist’s view, normativism is a completely separate commitment.

For these reasons, the non-normativist has a better reply to the normativity objection than the normativist pluralist. But I should be clear about the nature of this advantage: although nontrivial, it is not so great as to quash any considerations in favor of a normativist version of pluralism. In particular, if a pluralist is strongly committed to logical normativism for reasons independent of pluralism, then she may well be willing to bear the costs I’ve just highlighted.

I’ll finish by arguing that both the normativist and non-normativist guises of this reply to the normativity objection are superior to the most thoroughly developed extant line of response. Colin Caret (2016) contends both that the normativity objection is a serious one, and that the pluralist must embrace normativism to avoid it. These considerations lead him to formulate a radical reply on behalf of the normativist pluralist: contextualism about validity. According to Caret, the pluralist should maintain that the meaning of ‘valid’ varies according to the conversational context of its occasions of use. This is a high price to pay. Intuitively, *whether or not an argument is valid* has nothing to do with conversational background.⁵⁰ One way of feeling the force of this intuition is to note that the contextualization of validity means that an argument from Γ to ϕ

⁴⁹ In the terminology of n. 14, violations of consequence_{*IMP*} are thin mistakes, whereas violations of classical, relevant, and intuitionistic logic are thick mistakes.

⁵⁰ Assume that the argument doesn’t contain indexical expressions.

can be valid on one occasion, but invalid on another. So a speaker can truly say ‘The argument from Γ to ϕ is valid’ and then, with a sufficient change of context, truly say ‘The argument from Γ to ϕ is *invalid*’ for one and the same Γ, ϕ . This result does violence to the meaning of ‘valid’, at least in my idiolect. Arguments are valid or not no matter the conversational context. Now, *if* there were no other way to respond to the normativity objection, then perhaps the pluralist ought to be willing to contextualize validity. But there is another way to respond to the objection.

In particular, my response to the normativity objection avoids the unattractive commitment. On my account, the validity of the argument from P to $Q \vee \neg Q$ does not change with context of utterance. It is *always, everywhere* classically valid and relevantly invalid. What *can* change with context are the goals for which an agent deploys an argument. (Or, if one is a normativist who rejects the appeal to epistemic goals, what can change are the reasons for abiding by the normative requirements of one logic rather than another.) Hence some consequence relation may become more or less *salient* on a given occasion of use. In this way, context may help determine which logic to *use* for the task at hand. But it does *not* determine the consequence relations themselves. Their extensions are fixed independently of context. Thus Caret is wrong to think that responding to the normativity objection requires the drastic move of contextualizing logical consequence.

Caret’s mistake stems from a familiar source: his assumption of normativism. In particular, he claims that a logical pluralist must be a normativist (Caret 2016, 7). I’ve shown that this is a mistake.⁵¹ Non-normativist logical pluralism is not only a dialectical possibility; it is a well-motivated pluralist position that has an elegant response to the normativity objection and an attractive explanation of the normative status of logic.

⁵¹ And that even normativist pluralists have a better response to the normativity objection than contextualism, a response that only became apparent when approaching the problem without normativist blinders on.

Conclusion

My main aim has been to put non-normativist logical pluralism on the dialectical map. As well as shining a light on this previously neglected position, separating pluralism from normativism has an additional benefit. It helps to clarify what's at stake in debates between pluralists and monists. Rather than being trivial, there are two serious areas of disagreement in such debates: first, about what logic is for; second, about how many logics do whatever that is. In the final section of the paper, I considered the normativity objection, which has been a recalcitrant thorn in pluralism's side. I formulated a more powerful version of the objection, which fixes some of its original shortcomings. The objection is that the pluralist's strictly strongest logic does all the normative or epistemic work, leaving her other logics inert and thereby not genuine consequence relations after all. In reply, I rejected the claim that the pluralist's weaker logics fail to do work. I finished by highlighting the costs the normativist incurs in running this line of response, costs that are neither devastating nor trivial, and which the non-normativist avoids. Despite these costs, if one insists on being a normativist pluralist, my reply is preferable to the best-developed extant response: Colin Caret's contextualism about validity.

In short, by distinguishing pluralism and normativism, I've exposed, motivated, and explicated a new version of logical pluralism. Pluralism without normativism inherits the advantages of Beall and Restall's account, while avoiding its normativist drawbacks.

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